### **Water Conservation**

Northwest Basins Planning Area John Riggins jrriggins@azwater.gov May 18, 2017



PROTECTING

ARIZONA'S WATER SUPPLIES

for ITS NEXT CENTURY

## Additional Information on our Website



### Conservation Home



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### arizonawaterawareness.com

Year-round, regional and seasonal activities and information about water and its conservation. Conservation partners from around the state contribute events and resources.

In Arizona We Care, We're Water Aware!

### WATER CONSERVATION TOOLS & RESOURCES

Practicing a low water-use lifestyle is a way everyone can help ensure a long-term, sufficient water supply. Reducing your water use helps meet future needs, results in cost savings, decreases energy use, and helps preserve the environment.

To help Arizonans learn how to reduce water use, ADWR offers an assembly of tools to assist residents, businesses, communities and water providers in the design and implementation of comprehensive and proven conservation strategies. Remember, you choose how you use! Thank you for doing your part to use water efficiently.









Technologies

Water Planners & Providers

Residential

Commercial, **Industrial** & Institutional









**Agriculture** Professionals

Water Education

About Us

### **Technologies updates:**

- FPA WaterSense info
- **Heating & Cooling**
- Pools, Spas & Water Features
- **Water Conservation Tips for Arizona** Residents
- Info for Water Planners & Providers
- Residential water conservation
  - ❖ Indoor, outdoor, graywater & rainwater harvesting
- **Commercial, Industrial & Institutional** info
  - AMA conservation requirements for Industrial water users
  - Best Management Practices
- **Agricultural Conservation** 
  - AMAs conservation requirements
- Landscape professionals
  - Irrigation & Plant list
- **Water Conservation Education &** Outreach
  - Activities & resources for students
  - **Resources & Workshops**



### Additional Information on Water



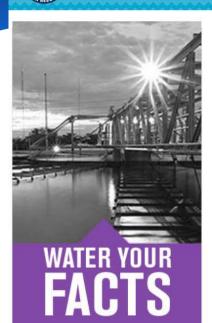
**Events** 

News

Resources

Contact Us





Arizona leads the nation in comprehensive water supply management.

LEARN MORE



Arizona has developed a diverse portfolio of water strategies which serve as the foundation of our State's robust water system, however we are



A stable secure long-term water supply is the foundation on which Arizona's growing economy is built.

LEARN MORE



# **HOW CAN I**

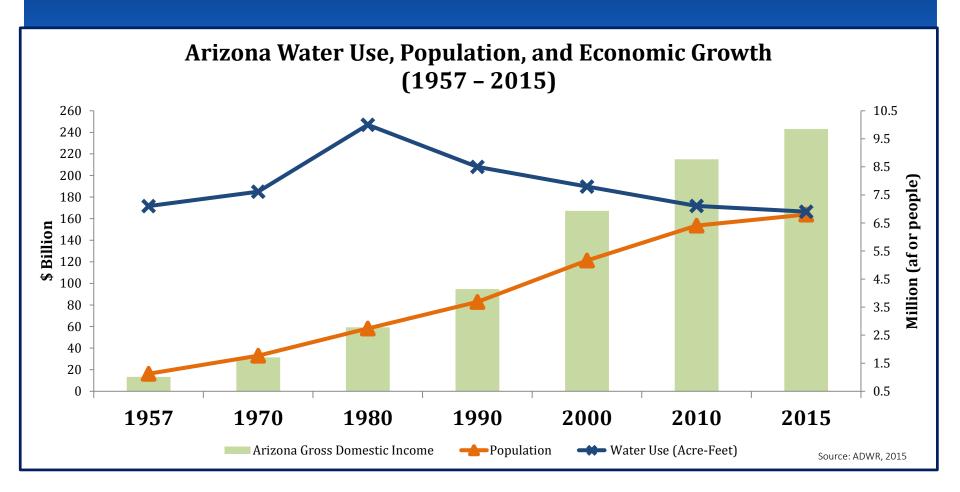
We must all do our part to conserve and protect our most precious resource.

LEARN MORE

IN THE NEWS

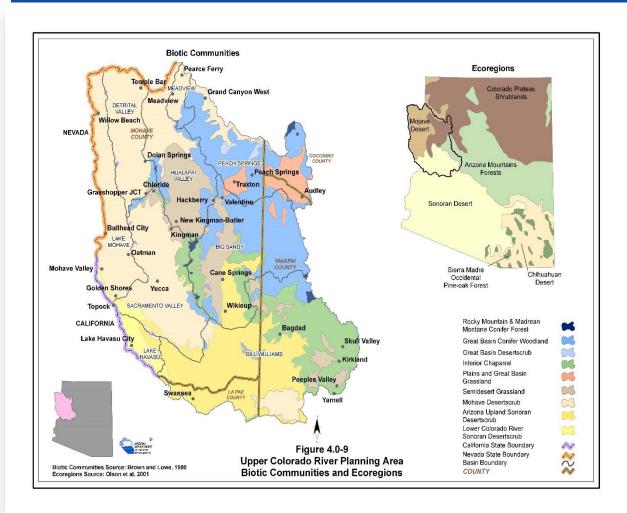


### **Arizona's Water Management Success**





# Why Conserve?



- Northwest Basins Planning Area:
  - ❖ Mohave Desert
  - ❖Sonoran Desert
- Kingman, AZ annual precipitation (inches)
  - **❖**10.35" (1901-2003)₁
- Yucca, AZ annual precipitation (inches)7.60" (1950-2005)
- The Planning Area is in an arid transitional desert between the Mohave and Sonoran Deserts



# Municipal Water Conservation





# Arizona Corporation Commission Best Management Practices

- \* Water Companies with ACC Water Conservation Tariffs
- \* The Arizona Corporation Commission may require a water company to implement a Best Management Practice (BMP)
- \* These Practices are selected from the Arizona Department of Water Resources list of BMPs
- \* BMPs include: Public education, leak detection programs, water system audits, large landscape conservation programs and many more
  - \* See the ACC Link below for a complete list of BMPs offered
- Nine water systems in the Northwest Basins Planning Area are regulated by the ACC



# Community Water System Conservation Plans

- \* The Community Water System offer water conservation measures & BMPs
  - \* Can reduce water use, improve water efficiency and enhance drought preparedness
- \* Conservation Measures include:
  - \* Metering wells
  - \* Leak detection & repair
  - \* Meter testing, repair and replacement
  - \* Public education
  - Residential audit program
  - \* Home leak repair advice
  - \* High water use notification
  - \* Many others can be found on the Arizona Department of Water Resources Community Water Systems information webpage:
    - \* http://www.azwater.gov/AzDWR/StatewidePlanning/drought/CWS.htm



# City of Kingman Water Conservation

- Conservation tips and education provided
- \* City wells and service connections are metered
- \* Water rate structure encourages efficient water use
  - \* Higher rates for higher uses

WATER RATES (Within City Limits) [EFFECTIVE 07/01/2013]  Residential water charges are based on consumption using the tired rate structure below.  * SLSTX – Sales Tax of 8.35% is added to all water sales  ** STTAX – State imposed surcharge on water consumption at a rate of .0065 x 1,000 gallons  RESIDENTIAL - WATER		WATER RATES (Outside City Limits)  Residential water charges are based on consumption using the tired rate structure below.  * SLSTX – Sales Tax of 8.35% is added to all water sales  ** STTAX – State imposed surcharge on water consumption at a rate of .0065 x 1,000 gallons  RESIDENTIAL - WATER					
				Monthly Rate Blocks (per 1,000 gallons)		Monthly Rate Blocks (per 1,000 gallons)	
				0 to 10,000 gallons	\$1.93	0 to 10,000 gallons	\$2.60
				10,001 to 45,000 gallons	\$2.42	10,001 to 45,000 gallons	\$3.28
				45,001 gallons and over	\$3.64	45,001 gallons and over	\$4.91
NON-RESIDENTIAL - WATER		NON-RESIDENTIAL - WATER					
Monthly Rate Blocks (per 1,000 gallons)		Monthly Rate Blocks (per 1,000 gallons)					
ALL Usage	\$2.18	ALL Usage	\$2.95				
RRIGATION - WATER		IRRIGATION - WATER					
Monthly Rate Blocks (per 1,000 gallons)		Monthly Rate Blocks (per 1,000 gallons)					
0 to 200,000	\$2.42	0 to 200,000	3.28				
200,001 gallons and over	\$3.64	200,001 gallons and over	\$4.91				
HYDRANT METERS - WATER		HYDRANT METERS - WATER					
Monthly Rate Blocks (per 1,000 gallons)		Monthly Rate Blocks (per 1,000 gallons)					
0 to 200,000	\$3.28						
200,001 gallons and over	\$4.91	0 to 200,000 200,001 gallons and over	3.28 \$4.91				
		200,001 gallons and over	<b>34.31</b>				
BASE RATES - WATER		BASE RATES - WATER					
BASE RATES	(monthly)	BASE RATES	(monthly)				
BASE RATE - ALL METER SIZES	\$7.21	BASE RATE - ALL METER SIZES	\$9.64				
CAPITAL RENEWAL FEE	\$3.75	CAPITAL RENEWAL FEE	\$3.75				



# Conserve in Your Community

- \* Support projects that use reclaimed wastewater for irrigation and other uses
- \* Encourage friends and neighbors to be more water conscious
- \* Teach children the importance of using water efficiently
- \* Do one thing every day to save water



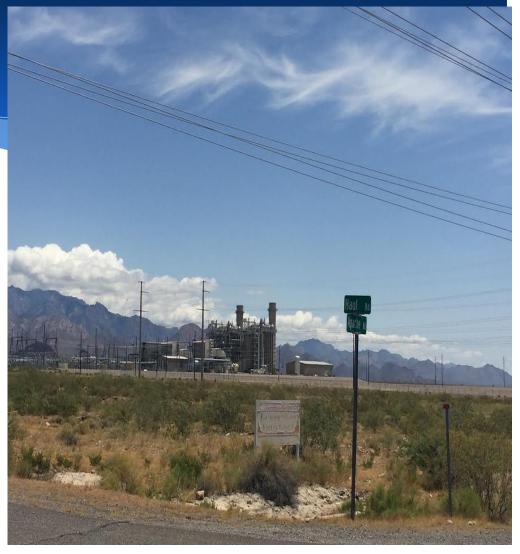
## Industrial Water Conservation



# Power Generating

### **Griffith Energy Plant:**

- Natural Gas Power Plant in Sacramento Basin
- The plant is a zero discharge facility
- Uses Clarifiers, Reverse
   Osmosis Filters and two
   evaporation ponds
- Raw Water Treatment system and closed loop condenser system₁



Griffith Energy Plant, Sacramento Basin



## Turf

More information on turf water conservation can be found:

http://www.azwater.gov/azdwr/StatewidePlanning/Conservation2/

- \* Install efficient landscape watering systems
- \* Minimize the amount of turf
- Use low water use plants for other landscaping
- \* Apply mulch around landscaping to reduce evaporation
- Proper soil preparation
- Use reclaimed water



# Questions?



Arizona Water Initiative Northwest Basins Planning Area

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